

REMARKS/ARGUMENTS

The present amendment and remarks are in response to the Office Action dated December 19, 2008.

Claims 1-6, 10-15, 17-19, 22 and 23 are active in the present application. Claims 1, 17 and 23 have been currently amended. Support for amended Claim 1 can be found on pages 6 (lines 1-11) and 22 (lines 10-30) of the specification. Support for amended Claim 17 can be found on pages 6 (lines 1-11), 11 (lines 9-13), 19 (lines 22-25) and 22 (lines 10-30) of the specification. Support for amended Claim 23 can be found on page 19 (lines 1-3) of the specification. No new matter is believed to have been introduced by the amended claims.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1-6, 10-15, 17-19, 22 and 23 under 35 U.S.C. § 103(a), as unpatentable over U.S. Patent 5,861,463 (hereinafter the '463 patent), in view of U.S. Patent 5,278,272 (hereinafter the '272 patent). Applicants respectfully traverse for the following reasons.

The '463 patent is directed to thermoplastic compositions comprising three components: (a) a polypropylene matrix, (b) an elastomeric impact modifier, and (c) at least one homogeneous linear or substantially linear ethylene polymer (see abstract).

The '463 patent desires an elastomeric impact modifier with an elastic recovery of at least 40%, preferably at least 60%, and more preferably at least 80% (ASTM D-412) – see column 3, lines 42-52 of the '463 patent. The elastic recovery of a homogeneously branched substantially linear ethylene/ α -olefin copolymer, with a Brookfield Viscosity (350°F) of 49,000 cP, is about 29-30% (ASTM D-412). One of ordinary skill in the art would recognize that such copolymers with lower viscosities, and copolymers that contain no long chain branching, should have even lower elastic recoveries. Thus, one skilled in the art will recognize that an ethylene/ α -olefin copolymer with a Brookfield Viscosity (350°F) from 500 cP to 50,000 cP, as claimed, should have an elastic recovery lower than 40%, and thus, such low viscosity copolymers do not meet the requirements of the '463 elastic impact modifier.

When combining references, the propose modification cannot render the prior art unsatisfactory for its intended purpose (see MPEP 2143.01, section V). The '463 patent discloses that its compositions have improved properties, including improved percent elongation to break, and other properties, which make such compositions useful for applications requiring both strength and flexibility in low temperature environments (see abstract). As shown in Table 2 of the '463 patent, the third phase component (or component (c) – see abstract) has a melt index (I2) ranging from 0.35 to 0.5, indicating a very high molecular weight interpolymer (Brookfield Viscosities (350°F) greater than 10^6 for homogeneously branched substantially linear copolymers). One of ordinary skill in the art would recognize that if this third phase component was replaced with a very low molecular weight ethylene/ α -olefin copolymer, with a Brookfield Viscosity (350°F) from 500 cP to 50,000 cP, as claimed, the “% Elongation at Yield” and the “% Elongation at Break,” as shown in Table 4, would both decrease. Thus, there is no motivation to modify the inventive compositions disclosed in the '463 patent, by using the low viscosity copolymers as claimed, since doing so, would result in compositions with reduced elongation properties. Thus, for these reasons, it would not have been obvious for one of ordinary skill in the art to use the lower viscosity (low molecular weight) copolymers, as claimed, in the compositions disclosed in the '463 patent. The '272 patent does not overcome the deficiencies of the '463 patent.

For at least the above reasons, the '463 patent, in view of the '272 patent, does not teach or suggest the invention as claimed. Applicants respectfully request the withdrawal of this rejection.

Applicants submit that the present amendment is now in condition for allowance, and request early notice of such action. If further issues remain, Applicants respectfully request that the Examiner call Applicants' undersigned representative.

Respectfully submitted,

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